SIDALCEA NEOMEXICANA (MALVACEAE) IN THE FLORA OF TEXAS

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ABSTRACT

Sidalcea neomexicana A. Gray is documented for the flora of Texas from a collection by Charles Wright in 1849 along Limpia Creek in Jeff Davis County. The specimen is housed in the Gray Herbarium.

Sidalcea neomexicana A. Gray is mentioned as closely approaching the Trans Pecos Ecoregion of Texas in southern New Mexico but it is not included in the recently published Flowering Plants of Trans-Pecos and Adjacent Areas (Powell & Worthington 2018). The species is included in the Texas flora in the FNA treatment of Sidalcea (Hill 2015), PLANTS database (USDA, NRCS 2020), and Biota of North America Program database (Kartez 2015) but with no specific location provided. Sivinski et al. (2011) observed that it occurs in Southwestern ciénegas and is tolerant of fairly alkaline conditions.

In literature and field studies of the flora and ecology of cienegas in west Texas, we discovered an historic collection of *Sidalcea neomexicana* in the Gray Herbarium, documenting the Texas occurrence.

Voucher. Texas. Jeff Davis Co.: Margin of the Limpia, 2-4 feet high, flowers purple, 24 Aug 1849, *Wright 966* (GH, Figure 1).

The Wright collection was made during an expedition from San Antonio, Texas to El Paso and on into New Mexico from May through October 1849 (Gray 1852; Johnston 1940). The location is given in Johnston (1940) as this: Wright 39, field # 966, "24 August 1849, margin of the Limpia, 2-4 feet high, flowers purple, Jeff Davis County." Limpia refers to Limpia Creek [in 1851 and 1852 changed by Wright to the masculine Limpio] which is primarily confined to Jeff Davis County. The stream is fed by perennial springs in its headwater drainages in the Davis Mountains, flows through the town of Fort Davis, then drains north paralleling Texas Highway 17 in its downward flow to Pecos County, where it goes underground or may completely dry. The creek is seasonally rain-dependent, mostly from late summer monsoon rains and some winter rain and snow precipitation.

We hoped to trace Wright's path and collections from near Pecos County, where he entered Jeff Davis County, to the higher reaches of Limpia Creek near Fort Davis. Unfortunately, that was not possible, as the collections and numbers were mixed without regard to locations, elevations, or anything else useful. More importantly, field numbers were disregarded by Gray upon distribution. He made what may be called distribution numbers, frequently uniting two or more field numbers from different locations and sometimes seasons and distributing them under the same distribution number (McKelvey 1956).



Figure 1. Sidalcea neomexicana collected in 1849 in Texas (Wright 966, GH).

ACKNOWLEDGEMENTS

We are grateful to the Gray Herbarium of Harvard University for permission to use the digital photograph and to Guy Nesom, editor of Phytoneuron, for his assistance.

LITERATURE CITED

- Hill, S.R. 2015. *Sidalcea*. <u>In</u> Flora of North America Editorial Committee (eds.). Flora of North America North of Mexico, Vol. 6. Oxford Univ. Press, New York and Oxford. http://beta.floranorthamerica.org/Sidalcea Accessed 25 August 2021.
- Johnston, I.M. 1940. Field notes of Charles Wright for 1849 and 1951-52, relating to collections from Texas, New Mexico, etc. 1-48, with commentary. Unpublished manuscript in the Gray Herbarium. [Online from the Biological Heritage Library of the Smithsonian Institution.]
- Kartesz, J.T. 2015. The Biota of North America Program (BONAP). North America Plant Atlas (http://bonap. Net. Napa. Chapel Hill, N.C. Accessed 14 December 2020.
- McKelvey, S.D. 1956. Botanical Exploration of the Trans-Mississippi West 1790-1850. Arnold Arboretum of Harvard University, Jamaica Plain, Mass. Reprinted 1991 by Northwest Reprints.
- Powell, A.M. and R.D. Worthington. 2018. Flowering Plants of Trans-Pecos Texas and Adjacent Areas. BRIT Press, Botanical Research Inst. of Texas, Fort Worth.
- Sivinski, R. and P. Tonne. 2011. Survey and assessment of arid springs cienegas in the southwestern region. ESA Section 6 report submitted to: New Mexico Energy, Minerals and Natural Resources Department, Santa Fe and USDI-Fish &Wildlife Service, Region 2, Albuquerque, New Mexico.
- USDA, NRCS. 2020. The PLANTS Database. National Plant Data Team, Greensboro, North Carolina. http://plants.usda.gov